

2007 Kentucky Building Code

Chapter 34 Evaluation Worksheet

Section 3410 Compliance Alternatives

3410.1 Compliance. The provisions of this section are intended to maintain or increase the current degree of public safety, health and general welfare in existing buildings while permitting repair, alteration, addition and change of occupancy without requiring full compliance with Chapters 2 through 33, or Sections 3401.3 through 3406, except where compliance with other provisions of this code is specifically required in this section.

3410.2 Applicability. Structures existing prior to August 15, 1982, in which there is work involving additions, alterations or changes of occupancy shall be made to conform to the requirements of this section or the provisions of Sections 3402 through 3406.

3410.4 Investigation and evaluation. For proposed work covered by this section, the building owner shall cause the existing building to be investigated and evaluated in accordance with the provisions of this section.

3410.4.1 Structural Analysis. The owner shall have a structure analysis of the existing building made to determine adequacy of structural systems for the proposed alteration, addition or change of occupancy. The existing building shall be capable of supporting the minimum load requirements of Chapter 16.

3410.5 Evaluation. The evaluation shall be comprised of three categories, fire safety, means of egress, and general safety, as defined in Sections 3410.5.1 through 3410.5.3.

3410.5.1 Fire safety. Included within the fire safety category are the structural fire resistance, automatic fire detection, fire alarm and fire suppression system features of the facility.

3410.5.2 Means of egress. Included within the means of egress category are the configuration, characteristics and support features for means of egress in the facility.

3410.5.3 General safety. Included within the general safety category are the fire safety parameters and the means of egress parameters.

3410.6 Evaluation process. The evaluation process specified herein shall be followed in its entirety to evaluate existing buildings. Table 3410.7 shall be utilized for tabulating the results of the evaluation. References to other sections of this code indicate that compliance with those sections is required in order to gain credit in the evaluation herein outlined. In applying this section to a building with mixed occupancies, where the separation between the mixed occupancies does not qualify for any category indicated in Section 3410.6.16, the score for each occupancy shall be determined and the lower score determined for each section of the evaluation process shall apply to the entire building.

Where the separation between the mixed occupancies qualifies for any category indicated in Section 3410.6.16, the occupancy scores shall apply to each portion of the building based on the occupancy of the space.

2007 Kentucky Building Code Chapter 34 Evaluation Worksheet



This worksheet should be used in conjunction with Section 3410. The positive or negative values obtained by working the computations for each safety parameter shall be entered in the 3 columns of Table 3410.7 in order to determine building score.

3410.6.1 Building Height

- The value for building height shall be the lesser value determined by the formulas in Section 3410.6.1.1
- Chapter 5 shall be used to determine the allowable height of the building, including allowable increases due to automatic sprinklers as provided for in Section 504.2

3410.6.1.1 Height Formula Height value, feet = $\frac{(AH) - (EBH)}{12.5} \times CF$

Equation 34-1

Height value, stories = $(AS - EBS) \times CF$

AH = Allowable height in feet from Table 503

EBH = Existing building height in feet

AS = Allowable height in stories from Table 503

EBS = Existing building height in stories

CF = 1 if $(AH) - (EBH)$ is positive

CF = Construction-type factor shown in Table 3410.6.6(2) if $(AH) - (EBH)$ is negative

Table 3410.6.6 (2) Construction-Type Factor

Factor	Type of Construction								
	1A	1B	2A	2B	3A	3B	4	5A	5B
	1.2	1.5	2.2	3.5	2.5	3.5	2.3	3.3	7

- The maximum score for a building shall be 10.
- Where mixed occupancies are separated and individually evaluated as indicated in Section 3410.6, the values AH, AS, EBH, and EBS shall be based on the height of the fire area of the occupancy being evaluated.

Height Value

Enter Height Value here and T.3410.7

3410.6.2 Building Area

- The value for building area shall be determined by the formula in Section 3410.6.2.2.
- Section 503 and the formula in Section 3410.6.2.1 shall be used to determine the allowable area of the building.
- This shall include any allowable increases due to open perimeter and automatic sprinklers as provided for in Section 506.

3410.6.2.1 Allowable Area Formula AA = $\frac{(SP + OP + 100) \times (\text{Area, Table 503})}{100}$

Equation 34-2

AA = Allowable Area

SP = Percent increase for sprinklers (Section 506.3)

OP = Percent increase for open perimeter (Section 506.2)

3410.6.2.2 Area Formula

- The following formula shall be used in computing the area value.
- Determine the Area Value for each occupancy fire area on a floor by floor basis.
- For each occupancy, choose the minimum Area Value of the set of values obtained for the particular occupancy.

Area Value $_i$ = $\frac{\text{Allowable Area } _i}{1200 \text{ Square Feet}} \left[1 - \left(\frac{\text{Actual Area } _i}{\text{Allowable Area } _i} + \dots + \frac{\text{Actual Area } _n}{\text{Allowable Area } _n} \right) \right]$

$_i$ = value for an individual separated occupancy on a floor

$_n$ = number of separated occupancies on a floor

- In determining the area value, the maximum permitted positive value for area is 50 percent of the fire safety score as listed in Table 3410.8. Mandatory Safety Scores.

Equation 34-3

Table 3410.8 Mandatory Safety Scores

Fire Safety	A1	A2	A3	A4, E	B	F	M	R	S1	S2
	16	19	18	23	24	20	19	17	15	23

Area Value

Enter Area Value here and T.3410.7

3410.6.3 Compartmentation

- Evaluate the compartments created by fire barrier and horizontal assemblies which comply with Sections 3410.6.3.1 and 3410.6.3.2 and which are exclusive of the wall elements considered under Sections 3410.6.4 and 3410.6.5.
- Conforming compartments shall be figured as the net area and do not include shafts, chases, stairways, walls, or columns.
- Using Table 3410.6.3 determine the appropriate compartmentation value (CV).

Table 3410.6.3 Compartmentation Values

Occupancy	Categories ^A				
	a Compartment size equal to or greater than 15, 000 SQ FT	b Compartment size of 10,000 SQ FT	c Compartment size of 7, 500 SQ FT	d Compartment size of 5,000 SQ FT	e Compartment size of 2, 500 SQ FT
A1, A3	0	6	10	14	18
A2	0	4	10	14	18
A4, B, E, S2	0	5	10	15	20
F, M, R, S1	0	4	10	16	22

^a For areas between categories, the compartmentation value shall be obtained by linear interpolation.

Compartmentation Value

Enter Compartmentation Value here and T.3410.7

3410.6.4 Tenant and Dwelling Unit Separations

- Evaluate the fire resistance rating of floors and walls separating tenants, including dwelling units, and not evaluated under Sections 3410.6.3 and 3410.6.5.
- Under the categories and occupancies in Table 3410.6.4, determine the appropriate value.

Table 3410.6.4 Separation Values

Occupancies	Categories				
	a	b	c	d	e
A1	0	0	0	0	1
A2	-5	-3	0	1	3
R	-4	-2	0	2	4
A3, A4, B, E, F, M, S1	-4	-3	0	2	4
S2	-5	-2	0	2	4

- The categories for tenant and dwelling unit separations are:

Category a – No fire partitions, incomplete fire partitions, no doors, doors not self closing or automatic closing

Category b – Fire partitions or floor assembly less than one-hour fire-resistance rating or not constructed in accordance with Sections 708 or 711, respectively.

Category c – Fire partitions with one-hour or greater fire-resistance rating constructed in accordance with Section 708 and floor assemblies with one-hour, but less than two-hour fire-resistance rating constructed in accordance with Section 711 or with only one tenant within the fire area.

Category d – Fire barriers with one-hour but less than two-hour fire-resistance rating constructed in accordance with Section 706 and floor assemblies with two-hour or greater fire-resistance rating constructed in accordance with Section 711.

Category e – Fire barriers and floor assemblies with two-hour or greater fire-resistance rating and constructed in accordance with Sections 706 and 711, respectively.

Tenant and Dwelling Unit Separations Value

Enter Tenant and Dwelling Unit Separations Value here and T.3410.7

3410.6.5 Corridor Walls

- Evaluate the fire-resistance rating and degree of completeness of walls which create corridors serving the floor, and constructed in accordance with Section 1017.
- This evaluation shall not include the wall elements considered under Section 3410.6.3 and 3410.6.4.
- Under the categories and groups in Table 3410.6.5, determine the appropriate value.

Occupancy	Categories			
	a	b	c^a	d^a
A-1	-10	-4	0	2
A-2	-30	-12	0	2
A-3, F, M, R, S-1	-7	-3	0	2
A-4, B, E, S-2	-5	-2	0	5

^a Corridors not providing at least one-half the travel distance for all occupants on a floor shall use category b.

- The Categories for corridor walls are:

Category a – No fire partitions; incomplete fire partitions, no doors, or doors not self-closing

Category b – Less than one-hour fire-resistance rating or not constructed in accordance with Section 708.4

Category c – One-hour to less than two-hour fire-resistance rating, with doors conforming to Section 715 or without corridors as permitted by Section 1017.

Category d – Two-hour or greater fire-resistance rating, with doors conforming to Section 715.

Corridor Wall Value

Enter Corridor Wall Value here and T.3410.7

3410.6.6 Vertical Openings

- Evaluate the fire-resistance rating of exit enclosures, hoistways, escalator openings, and other shaft enclosures within the building, and openings between two or more floors.
- Table 3410.6.6 (1) contains the appropriate protection values.
- Multiply that value by the construction type factor found in Table 3410.6.6 (2).
- If the structure is a one-story building, enter a value of 2.
- Unenclosed vertical openings that conform to the requirements of Section 707 shall not be considered in the evaluation of vertical openings.

3410.6.6.1 Vertical Opening Formula

- The following formula shall be used in computing vertical opening value.

$$VO = PV \times CF$$

VO = Vertical opening value

PV = Protection value (Table 3410.6.6 (1))

CF = Construction type factor (Table 3410.6.6 (2))

Equation 34-4

Table 3410.6.6(1) Vertical Opening Protection Value

Protection	Value
None (unprotected opening)	-2 times number of floors connected
Less than 1 hour	-1 times number floors connected
1 to less than 2 hours	1
2 hours or more	2

Table 3410.6.6(2) Construction Type Factor

Factor	Type of Construction								
	1A	1B	2A	2B	3A	3B	4	5A	5B
	1.2	1.5	2.2	3.5	2.5	3.5	2.3	3.3	7

Vertical Opening Value

Enter Vertical Opening Value here and T.3410.7

3410.6.7 HVAC Systems

- Evaluate the ability of the HVAC System to resist the movement of smoke and fire beyond the point of origin.
- Under the categories in Section 3410.6.7.1, determine the appropriate value.
- The categories for HVAC Systems are:

Category a – Plenums not in accordance with Section 602 of the International Mechanical Code. (-10 Points)

Category b – Air movement in egress elements not in accordance with Section 1017.4. (-5 Points)

Category c – Both categories a and b are applicable. (-15 Points)

Category d – Compliance of the HVAC System with Section 1017.4 and Section 602 of the International Mechanical Code. (0 Points)

Category e – Systems serving one story; or a central boiler/chiller system without ductwork connecting two or more stories (+ 5 Points)

HVAC System Value

Enter HVAC System Value here and T.3410.7

3410.6.8 Automatic Fire Detection

- Evaluate the smoke detection capability based on the location and operation of automatic fire detectors in accordance with Section 907 and the International Mechanical Code.
- Under the categories and occupancies in Table 3410.6.8, determine the appropriate value.

Table 3410.6.8 Automatic Fire Detection Values

Occupancy	Categories				
	a	b	c	d	e
A1, A3, F, M, R, S1	-10	-5	0	2	6
A2	-25	-5	0	5	9
A4, B, E, S2	-4	-2	0	4	8

- ♦ The categories for automatic fire detection are:

Category a – None

Category b – Existing smoke detectors in HVAC Systems and maintained in accordance with the *International Fire Code*.

Category c – Smoke detectors in HVAC Systems. The detectors are installed in accordance with the requirements for new buildings in the *International Mechanical Code*.

Category d – Smoke detectors throughout all floor areas other than individual sleeping units, tenant spaces and dwelling units.

Category e – Smoke detectors installed throughout the fire area.

Automatic Fire Detection Value

Enter Automatic Fire Detection Value here and T.3410.7

3410.6.9 Fire Alarm Systems

- Evaluate the capability of the fire alarm system in accordance with Section 907.
- Under the categories and occupancies in Table 3410.6.9, determine the appropriate value.

Table 3410.6.9 Fire Alarm System Values

Occupancy	Categories			
	a	b ^a	c	d
A1, A2, A3, A4, B, E, R	-10	-5	0	5
F, M, S	0	5	10	15

^a For buildings equipped throughout with an automatic sprinkler system, add 2 points for activation by a sprinkler water flow device.

- The categories for fire alarm systems are:

Category a – None

Category b – Fire alarm system with manual fire alarm boxes in accordance with Section 907.3 and alarm notification appliances in accordance with Section 907.9.

Category c – Fire alarm system in accordance with Section 907.

Category d – Category c plus a required emergency voice/alarm communications system and a fire command center that conforms to Section 403.8 and contains the emergency voice/alarm communications system controls, fire department communication system controls, and any other controls specified in Section 911 where those systems are provided.

Fire Alarm System Value

Enter Fire Alarm System Value here and T.3410.7.

3410.6.10 Smoke Control

- Evaluate the ability of a natural or mechanical venting, exhaust, or pressurization system to control the movement of smoke from a fire.
- Under the categories and occupancies in Table 3410.6.10, determine the appropriate value.

Table 3410.6.10 Smoke Control Values

Occupancy	Categories					
	a	b	c	d	e	f
A1, A2, A3	0	1	2	3	6	6
A4, E	0	0	0	1	3	5
B, M, R	0	2 ^a	3 ^a	3 ^a	3 ^a	4 ^a
F, S	0	2 ^a	2 ^a	3 ^a	3 ^a	3 ^a

^a This value shall be 0 if compliance with category D or E in Section 3410.6.8.1 has not been obtained.

Category a – None

Category b – The building is equipped throughout with an automatic sprinkler system. Openings are provided in exterior walls at the rate of 20 square feet (1.86 m²) per 50 linear feet (15240 mm) of exterior wall in each story and distributed around the building perimeter at intervals not exceeding 50 feet (15240 mm). Such openings shall be readily openable from the inside without a key or separate tool and shall be provided with ready access thereto. In lieu of operable openings, clearly and permanently marked tempered glass panels shall be used.

Category c – One enclosed exit stairway, with ready access thereto, from each occupied floor of the building. The stairway has operable exterior windows and the building has openings in accordance with Category b.

Category d – One smoke-proof enclosure and the building has openings in accordance with Category b.

Category e – The building is equipped throughout with an automatic sprinkler system. Each fire area is provided with a mechanical air-handling system designed to accomplish smoke containment. Return and exhaust air shall be moved directly to the outside without recirculation to other fire areas of the building under fire conditions. The system shall exhaust not less than six air changes per hour from the fire area. Supply air by mechanical means to the fire area is not required. Containment of smoke shall be considered as confining smoke to the fire area involved without migration to other fire areas. Any other tested and approved design which will adequately accomplish smoke containment is permitted.

Category f – Each stairway shall be one of the following: a smoke-proof enclosure in accordance with Section 1020.1.7; pressurized in accordance with Section 909.20.5; or shall have operable exterior windows.

Smoke Control Value

Enter Smoke Control Value here and T.3410.7.

3410.6.11 Means of Egress Capacity and Number

- Evaluate the means of egress capacity and the number of exits available to the building occupants.
- The means of egress are required to conform to Sections 1003 thru 1015 and 1017 thru 1024 (except that the minimum width required by this section shall be determined solely by the width for the required capacity in accordance with Table 1005.1).
- The number of exits credited is the number that are available to each occupant of the area being evaluated.
- Existing fire escapes shall be accepted as a component in the means of egress when conforming to Section 3403.
- Under the categories and occupancies in Table 3410.6.11, determine the appropriate value.

3410.6.11 continued on next page

Table 3410.6.11 Means of Egress Values

Occupancy	Categories				
	a	b	c	d	e
A1, A2, A3, A4, E	-10	0	2	8	10
M	-3	0	1	2	4
B, F, S	-1	0	0	0	0
R	-3	0	0	0	0

a - The values indicated are for buildings six stories or less in height.

For buildings over six stories in height, add an additional -10 points.

Category a - Compliance with the minimum required egress capacity is achieved using fire escape in accordance with Section 3404.

Category b - Capacity of the means of egress complies with Section 1003 and the number of exits complies with the minimum number required by Section 1019.

Category c - Capacity of the means of egress is equal to or exceeds 125 percent of the required means of egress capacity, the means of egress complies with the minimum required width dimensions specified in the code and the number of exits complies with the minimum number required by Section 1019.

Category d - The number of exits provided exceeds the number of exits required by Section 1019. Exits shall be located a distance apart from each other equal to not less than that specified in Section 1015.2.

Category e - The area being evaluated meets both categories c and d.

Means of Egress Capacity Value

Enter Means of Egress Capacity Value here and T.3410.7.

3410.6.12 Dead Ends

- In spaces required to be served by more than one means of egress, evaluate the length of the exit access travel path in which the building occupants are confined to a single path of travel.
- Under the categories and occupancies in Table 3410.6.12, determine the appropriate value.
- The categories for dead ends are:

Category a - Dead end of 35 feet (10,670 mm) in unsprinkled buildings or 70 feet (21,340 mm) in sprinkled buildings.

Category b - Dead end of 20 feet (6,096 mm); or 50 feet (15,240 mm) in group B in accordance with Section 1017.3, exception 2.

Category c - No dead ends; or ratio of length to width (L/W) is less than 2.5:1.

Table 3410.6.12 Dead End Values

Occupancy	Categories		
	a	b	c
A1, A3, A4, B, E, F, M, R, S	-2	0	2
A2, E	-2	0	2

A. For dead end distances between categories, the dead end value shall be obtained by linear interpolation.

Dead End Value

Enter Dead End Value here and T.3410.7

3410.6.13 Maximum Travel Distance to an Exit

- Evaluate the length of exit access travel to an approved exit.
- Determine the appropriate points in accordance with the following equation.
- The maximum allowable exit access travel distance shall be determined in accordance with Section 1015.1.

$$\text{Points} = 20 \times \frac{\text{Maximum allowable travel distance} - \text{maximum actual travel distance}}{\text{Maximum allowable travel distance}}$$

Maximum Travel Distance Value

Enter Maximum Travel Distance Value here and T.3410.7

3410.6.14 Elevator Control

- Evaluate the passenger elevator equipment and controls that are available to the fire department to reach all occupied floors.
- Elevator recall controls shall be provided in accordance with the International Fire Code.
- Under the categories and occupancies in Table 3410.6.14, determine the appropriate value.
- The values shall be zero for a single story building.

Table 3410.6.14 Elevator Control Values

Elevator Travel	Categories			
	a	b	c	d
Less than 25 feet of travel above or below the primary level of elevator access for emergency fire fighting or rescue personnel.	-2	0	0	+2
Travel of 25 feet or more above or below the primary level of elevator access for emergency fire fighting or rescue personnel.	-4	NP	0	+4

- The categories for elevator controls are:

3410.6.14 categories continued on next page

Category a – No elevator

Category b – Any elevator without Phase 1 and 2 recall

Category c – All elevators with Phase 1 and 2 recall as required by the International Fire Code.

Category d – All meet category c; or category b where permitted to be without recall; and at least one elevator that complies with new construction requirements serves all occupied floors.

Elevator Control Value

Enter Elevator Control Value here and T.3410.7

3410.6.15 Means of Egress Emergency Lighting

- Evaluate the presence of and reliability of means of egress emergency lighting.
- Under the categories and occupancies in Table 3410.6.15, determine the appropriate value.

Table 3410.6.15 Means of Egress Emergency Lighting Values

Number of exits required by Section 1010	Categories		
	a	b	c
Two or more exits	NP	0	4
Minimum of one exit	0	1	1

- The categories for means of egress emergency lighting are:

Category a – Means of egress lighting and exit signs not provided with emergency power in accordance with Section 2702.

Category b – Means of egress lighting and exit signs provided with emergency power in accordance with Section 2702.

Category c – Emergency power provided to means of egress lighting and exit signs which provides protection in the event of power failure to the site or building.

Means of Egress Emergency Lighting Value

Enter Means of Egress Emergency Lighting Value here and T.3410.7

3410.6.16 Mixed Occupancies

- Where a building has two or more occupancies that are not in the same occupancy classification, the separation between the mixed occupancies shall be evaluated in accordance with this section.
- Where there is no separation between the mixed occupancies or the separation between mixed occupancies does not qualify for any of the categories indicated in Section 3410.6.16.1, the building shall be evaluated as indicated in Section 3410.6 and the value for mixed occupancies shall be zero.
- Under the categories and occupancies in Table 3410.6.16, determine the appropriate value.
- For buildings without mixed occupancies, the value shall be zero.

Table 3410.6.16 Mixed Occupancy Values^a

Occupancy	Categories		
	a	b	c
A1, A2, R	-10	0	10
A3, A4, B, E, F, M, S	-5	0	5

^a For fire resistance ratings between categories, the value shall be obtained by linear interpolation.

- The categories for mixed occupancies are:

Category a – Minimum one-hour fire barriers between occupancies

Category b – Fire barriers between occupancies in accordance with Section 508.3.3.

Category c – Fire barriers between occupancies having a fire resistance rating of not less than twice that required by Section 508.3.3.

Mixed Occupancy Value

Enter Mixed Occupancy Value here and T.3410.7

3410.6.17 Sprinklers

- Evaluate the ability to suppress a fire based on the installation of an automatic sprinkler system in accordance with Section 903.3.1.1.
- "Required Sprinklers" shall be based on the requirements of this code.
- Under the categories and occupancies in Table 3410.6.17, determine the appropriate value.

Table 3410.6.17 Sprinkler System Values

Occupancy	Categories					
	a	b	c	d	e	f
A1, A3, F, M, R, S1	-6	-3	0	2	4	6
A2	-4	-2	0	1	2	4
A4, B, E, S2	-12	-6	0	3	6	12

- The categories for automatic sprinkler protection are:

3410.6.17 categories continued on next page

Category a – Sprinklers are required throughout; sprinkler protection is not provided or the sprinkler system design is not adequate for the hazard protected in accordance with Section 903.

Category b – Sprinklers are required in a portion of the building; sprinkler protection is not provided or the sprinkler system design is not adequate for the hazard protected in accordance with Section 903.

Category c – Sprinklers are not required, none are provided.

Category d – Sprinklers are required in a portion of the building; sprinklers are provided in such portion; the system is one which complied with the code at the time of installation and is maintained and supervised in accordance with Section 903.

Category e – Sprinklers are required throughout; sprinklers are provided throughout in accordance with Chapter 9.

Category f – Sprinklers are not required throughout; sprinklers are provided throughout in accordance with Chapter 9.

Sprinkler Value

Enter Sprinkler Value here and T3410.7

3410.6.18 Incidental Use

- Evaluate the protection of incidental use areas in accordance with Section 508.2.
- Do not include those where this code requires suppression throughout the building including covered mall buildings, high rise buildings, public garages, and unlimited area buildings.
- Assign the lowest score from Table 3410.6.18 for the building or fire area being evaluated.
- If there are no specific occupancy areas in the building or fire area being evaluated, the value shall be zero.

Table 3410.6.18 Incidental Use Area Values ^a

Protection Required by Table 508.1.1	Protection Provided						
	NONE	1 Hour	AFSS	AFSS with SP	1 HR. and AFSS	2 Hours	2 HR. and AFSS
2 Hours and AFSS	-4	-3	-2	-2	-1	-2	0
2 Hours, or 1 Hour & AFSS	-3	-2	-1	-1	0	0	0
1 Hour and AFSS	-3	-2	-1	-1	0	-1	0
1 Hour	-1	0	-1	0	0	0	0
1 Hour, or AFSS with SP	-1	0	-1	0	0	0	0
AFSS with SP	-1	-1	-1	0	0	-1	0
1 Hour or AFSS	-1	0	0	0	0	0	0

^a AFSS = Automatic Fire Suppression System; SP = Smoke Partitions (See Section 508.2.2)

Incidental Use Value

Enter Incidental Use Value here and T.3410.7

3410.7 Building score. After determining the appropriate data from Section 3410.6, enter those data in Table 3410.7 and total the building score.

3410.8 Safety scores. The values in Table 3410.8 are the required mandatory safety scores for the evaluation process listed in Section 3410.6.

3410.9 Evaluation of building safety. The mandatory safety score in Table 3410.8 shall be subtracted from the building score in Table 3410.7 for each category. Where the final score for any category equals zero or more, the building is in compliance with the requirements of this section for that category. Where the final score for any category is less than zero, the building is not in compliance with the requirements of this section.

Table 3410.8 Mandatory Safety Scores ^a

Occupancy	Fire Safety (MFS)	Means of Egress (MME)	General Safety (MGS)
A1	16	27	27
A2	19	30	30
A3	18	29	29
A4, E	23	34	34
B	24	34	34
F	20	30	30
M	19	36	36
R	17	34	34
S1	15	25	25
S2	23	33	33

^a MFS = Mandatory Fire Safety; MME = Mandatory Means of Egress; MGS = Mandatory General Safety

3410.9.1 Mixed occupancies. For mixed occupancies, the following provisions shall apply:

- 1.) Where the separation between mixed occupancies does not qualify for any category indicated in Section 3410.6.16, the mandatory safety scores for the occupancy with the lowest general safety score in table 3410.8 shall be utilized. (See Section 3410.6)
- 2.) Where the separation between mixed occupancies qualifies for any category indicated in Section 3410.6.16, the mandatory safety scores for each occupancy shall be placed against the evaluation scores for the appropriate occupancy.

Table 3410.7 Summary Sheet – Building Code

Existing Occupancy _____	Proposed Occupancy _____
Year building was constructed _____	Num. of stories _____ Height in feet _____
Type of Construction _____	Area per floor _____
Percentage of open perimeter _____ %	Percentage of height reduction _____ %
Completely suppressed: Yes _____ No _____	Corridor wall rating _____
Compartmentation: Yes _____ No _____	Required door closers: Yes _____ No _____
Fire-resistance rating of vertical opening enclosures _____	
Type of HVAC system _____	, serving number of floors _____
Automatic Fire detection: Yes _____ No _____	type and location _____
Fire alarm system: Yes _____ No _____	type _____
Smoke Control: Yes _____ No _____	type _____
Adequate exit routes: Yes _____ No _____	Dead Ends: _____ Yes _____ No _____
Maximum exit access travel distance _____	Elevator Controls: Yes _____ No _____
Means of egress emergency lighting: Yes _____ No _____	Mixed Occupancies: Yes _____ No _____

Safety Parameters	Fire Safety (FS)	Means of Egress (ME)	General Safety (GS)
3410.6.1 Building Height			
3410.6.2 Building Area			
3410.6.3 Compartmentation			
3410.6.4 Tenant & Dwelling Unit Separations			
3410.6.5 Corridor Walls			
3410.6.6 Vertical Openings			
3410.6.7 HVAC Systems			
3410.6.8 Automatic Fire Detection			
3410.6.9 Fire Alarm System			
3410.6.10 Smoke control	* * * *		
3410.6.11 Means of Egress	* * * *		
3410.6.12 Dead ends	* * * *		
3410.6.13 Maximum Exit Access Travel Distance	* * * *		
3410.6.14 Elevator Control			
3410.6.15 Means of Egress Emergency Lighting	* * * *		
3410.6.16 Mixed Occupancies		* * *	
3410.6.17 Automatic Sprinklers		÷ 2 =	
3410.6.18 Incidental Use Area Protection			
Building score – total value			

* * * * No applicable value to be inserted.

Table 3410.9 Evaluation Formulas ^a

Formula	T.3410.7	T.3410.8	Score	Pass	Fail
FS-MFS ≥ 0	_____ (FS)	- _____ (MFS) =	_____	_____	_____
ME – MME ≥ 0	_____ (ME)	- _____ (MME)	_____	_____	_____
GS – MGS ≥ 0	_____ (GS)	- _____ (MGS) =	_____	_____	_____

- a. FS = Fire Safety MFS = Mandatory Fire Safety
 ME = Means of Egress MME = Mandatory Means of Egress
 GS = General Safety MGS = Mandatory General Safety